GCCS/DII COE System Integration Support

DII COE Segment
System Administrator's Manual
(for NS-NEWSS Version 1.0.0.3)

March 10, 1997

Prepared for:

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Defense Information Infrastructure (DII)

Common Operating Environment (COE)

System Administrator's Manual
Netscape News Server (NS-NEWSS)
Version 1.0.0.3 (Solaris 2.5.1)

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Preface

The following conventions are used in this document:

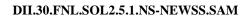|	
Bold	Used for information that is typed, pressed, or selected in executables and instructions. For example, select **connect to host**.
Italics	Used for file names, directories, scripts, commands, user IDs, document names, and Bibliography references; and any unusual computerese the first time it is used in text.
Underline	Used for emphasis.
Arrows <>	Used to identify keys on the keyboard. For example <Return>.
"Quotation Marks"	Used to identify informal, computer-generated queries and reports, or coined names; and to clarify a term when it appears for the first time. For example "Data-Generation Report."
Courier Font	Used to denote anything as it appears on the screen or command lines. For example `tar xvf dev/rmt/3mm`
Capitalization	Used to identify keys, screen icons, screen buttons, field, and menu names.

1. Netscape News Server (NS-NEWSS) Overview

The NS-NEWSS segment contains a suite of programs which are designed to receive, store, manage, and forward news articles throughout a network of news servers. Users accessing these servers are able to read articles from, and post articles to one or more newsgroups.

This document presents a description of basic procedures which are necessary to administer the Netscape News Server and the Netscape Administration server. This document has been organized in the following manner:

C   Basic Server Administration Operations - describes how to start, stop, and configure the Netscape News Server and Netscape Administration Server.

C   Netscape News Server Configuration - describes the function of key news server configuration files.

C   Newsgroup Creation and Propagation - describes how to create "local" and "distributed" newsgroups and how to delete local newsgroups.

In addition to the information provided by this document, the InterNet News (INN) Frequently Asked Questions (FAQ) files, as well as the INN man pages (which can be accessed by setting your *$MANPATH* variable to */h/COE/Comp/NS-NEWSS/man*) have been included with this segment. The FAQ files and man pages are not a part of the Netscape News Server software distribution but have been included to provide additional information on how to administer a news server.

Refer to the *Netscape News Server - Installation and Reference Guide* provided by Netscape Communication Corporation, to obtain detailed information regarding the administration of your Netscape News Server.

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2. Basic Server Administration Operations

2.1   Starting and Stopping Your News Server's Administration Server

The Administration Server is a HyperText Transfer Protocol (HTTP) server deamon which enables you to configure the Netscape News Server via HyperText Markup Language (HTML) forms called "Server Manager" forms. In order to access these forms, the Administration Server must be running. To start-up the Administration Server, run the following command as *root*:

```
/h/COE/Comp/NS-NEWSS/start-admin
```

After you have made all of the necessary changes to the news servers configuration, you may bring down the Administration Server. To stop the Administration Server, run the following command:

```
/h/COE/Comp/NS-NEWSS/stop-admin
```

NOTE:	Netscape recommends that the Administration Server not be left running when it is not in use, for security reasons.

2.2   Stopping and Starting Your News Server

Two primary reasons for stopping or re-starting your news server might be:

C   To prevent your server from receiving new news articles from other news servers so that you may perform important maintenance procedures on your news server.

C   To apply changes made to the configuration of your news server.

2.2.1   Stopping Your News Server

To stop your news server, perform the following steps:

Step 1:   Start-up your news server's Administration Server (see Section 2.1) and access the main Server Manager form.

Step 2:   Click on the **Starting and Stopping the Server** server control link.

Step 3:   On the form which follows, click on the **Shut down!** button.

You may also stop your news server by typing the following command as user *root* from the command line:

> **/h/COE/Comp/NS-NEWSS/news-119/stop**

2.2.2 Starting Your News Server

To start your news server after it has been stopped, perform the following steps:

Step 1: Start-up your news server's Administration Server (see Section 2.1) and access the main Server Manager form.

Step 2: Click on the **Starting and Stopping the Server** server control link.

Step 3: On the form which follows, click on the **Startup!** button.

You may also start your news server by typing the following command as user *root* from the command line:

> **/h/COE/Comp/NS-NEWSS/news-119/start**

2.3 Using Server Manager Forms to Configure Netscape News Server

To use the Server Manager forms to modify your NS-NEWSS configuration, perform the following steps:

Step 1: Start the Administration Server (see Section 2.1).

Step 2: Make sure your news server is running.

Step 3: Using Netscape Navigator, go to the following URL:

> `http://<your_news_server_machine_name>.<domain>:4334/`

Step 4: When prompted, enter the user name and authentication code (i.e., password) for your Netscape News Administrator (i.e., the news administrator's user name and authentication code that was entered during installation time).

Step 5: After the news administrator has been successfully authenticated, the Netscape Server Manager form will be displayed. To access the main Server Manager form, click on the **Netscape News Server for port 119** server control link.

Once you have reached the Netscape Server Manager, News Server page, follow all subsequent instructions to modify your news server's configuration.

2.4   Configuring Your Administration Server

To modify your news server's Administration Server (e.g., modify the news administrator's password), perform the following steps:

Step 1:   Start-up the Netscape News Administration Server (if necessary).

Step 2:   From within Netscape Navigator, access the main Server Manager form (see Section 2.1).

Step 3:   Under the Administration Server section, click on the **Configure the Admin Server** server control link.

Follow all subsequent instructions provided to modify your administration server's configuration.

2.5   Netscape News Server Processes

The Netscape News Server comprises several processes which run in the background. Each process is responsible for performing a specific function pertaining to the receiving, storing, expiring, and forwarding of news articles. To view news processes that may be running at any given time, type the following command:
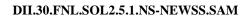
```
ps -ef | grep /h/COE/Comp/NS-NEWSS
```

Below is a brief description of each of the Netscape News Server background processes.

innd: Responsible for listening to port, allowing users to connect to read, and post news articles.

newstime: Responsible for scheduling and running the following background processes:

        C   *news.daily* - expires old news articles and updates news server database (occurs once a day).

        C   *nntpsend* - forwards news articles to neighboring news servers (occurs several times a day).

When automated mechanisms for starting or stopping these processes are not available, these processes can be stopped by using the `kill <id of specific process>`command or re-started by using the `kill -HUP <id of specific process>`command.

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3. Netscape News Server Configuration

NS-NEWSS uses a number of text files to define its configuration. These files are located in the */h/COE/Comp/NS-NEWSS/news-119* news server sub-directory.

These text files may be modified either manually using a text editor or, by accessing the Netscape Administration Server. However, it is highly recommended that you modify these files using the Administration Server's Server Manager forms (see Section 2.3).

This section briefly describes the purpose of each key configuration file. For detailed information regarding the format and function of these files and other configuration files, refer to Chapter 6 of the *Netscape News Server - Installation and Reference Guide (UNIX))*.

active   Contains the list of active newsgroups for your news server (your news server <u>must be shut down</u> before making changes to this file).

control.ctl   Specifies how the news server handles control messages (see Section 4.4.1).

hosts.nntp   Used by the *innd* daemon to generate a list of news site host machines that "feed" or transmit articles to your news server.

newsfeeds   Specifies which incoming articles are forwarded to the sites that receive articles from your news server.

nnrp.access   Specifies grants or denies access permissions to news clients and servers desiring to read, post, or transmit news articles to your server.

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4. Newsgroup Creation and Propagation

Creating a newsgroup is as simple as adding an entry for the new newsgroup into your news server's *active* file (see Section 3). After this entry has been added, the news server will create and store any news articles addressed to this new newsgroup into a directory hierarchy which corresponds to the naming convention used for this new newsgroup (e.g., articles addressed to *news.crisis.somolia* will be stored in the *<newspool_ home_directory>/news/crisis/somolia* directory). Creating a newsgroup in this way creates a local newsgroup on your news server. This means that articles sent to this newsgroup on your news server may only be read by users who have been granted permission to connect to your server and access this new newsgroup. Even if a newsgroup by the same name is created on another news server, (i.e, a neighboring news server) the newsgroup will be local to that neighboring news server alone; users accessing this newsgroup will not be able to access and read articles sent to the newsgroup on your news server. To create a non-local or distributed newsgroup, articles addressed to a newsgroup must be passed back and forth between news servers where this newsgroup exists.

To help facilitate the creation and management of both local and distributed newsgroups, several mechanisms have been provided either with your Netscape News Server or, by DII news server-related segments (e.g., News Make Group segment). This section will briefly describe the mechanisms and automated procedures that can be used to create local and distributed newsgroups on networked news servers. For further information on how to create newsgroups, refer to the *Netscape News Server - Installation and Reference Guide (UNIX)*.

4.1   Creating a Newsgroup - How It Works

4.1.1   Control Messages and the *control.ctl* file

Two key mechanisms in the creation of newsgroups are "Control" messages and the news server's *control.ctl* file. Control messages are sent as news articles and contain information which instruct the news server of specific operations that should be performed. The *control.ctl* file determines how control messages sent to your news server are handled. The *control.ctl* file contains entries for each control message type in order to instruct the news server of what operation should be performed for each control message it receives. The n*ewgroup* control messages instruct a news server to create a particular newsgroup. It is important to realize that a control message only conveys information to a news server. Therefore, a *newgroup* control message does not create a newsgroup, nor is it necessary for creating a newsgroup (see Section 4).

File entries for *control.ctl* have the following format:

```
<message>:<from>:<newsgroups>:<action>
```

where:

`<message>`	Control message or "all" if it applies to all control messages.
`<from>`	Pattern that must match from the "From" line (i.e., who sent the control message).
`<newsgroup>`	Pattern that must match the newgroup being created or removed.
`<action>`	What to do:

doit	Perform action (usually sends mail as well)
doifarg	Do if command had an argument
doit=xxx	Do action; log to file *xxx* (see below)
drop	Ignore messages
log	Write one line error message to error log
log=xxx	Log to *xxx* (see below)
mail	Send mail to news administrator.

xxx=

mail	Send mail to news administrator
(blank)	Log to */dev/null* (i.e., discard)
/full/path/foo	log to */full/path/foo*
foo	log to *${LOG}/foo.log*.

> **NOTE:**   The last match found, is used.

Therefore, a *control.ctl* entry corresponding to a *newgroup* control message will generally have one of the following formats:

```
newgroup:<from>:<newsgroups>:doit
```

or

```
newgroup:<from>:<newsgroups>:mail
```

For example, the *control.ctl* entry:

```
newgroup:newsadmin@mydomain:news.crisis.*:doit
```

tells the news server that any *newgroup* control messages sent from user *<newsadmin>* which specify a newsgroup matching the pattern *news.crisis.** should be created <u>immediately</u> (i.e., action type = *doit*) without requiring any further intervention from the news administrator.

Similarly, the entry:

```
newgroup:newsadmin@mydomain:news.crisis.*:mail
```

tells the news server that any *newgroup* control messages sent from user *<newsadmin>* which specify a newsgroup matching the pattern *news.crisis.** should <u>not</u> be created at this time, but instead, a mail message containing instructions on how to create this newsgroup manually should be sent to the news administrator (i.e., action type = *mail*).

Therefore, for each newsgroup you have automatically created or that requires news administrator intervention for creation, will need to have the appropriate *control.ctl* entry entered.

4.2 Using Server Manager Forms to Create Newsgroups

4.2.1 Creating a Local Newsgroup

To create a local newsgroup using Server Manager forms, perform the following steps:

Step 1:   Start-up the Netscape News Administration Server (if necessary).

Step 2:   Go to the main Server Manager form (see Section 2.3).

Step 3:   Under the Newsgroup Management section, click on the **Create a Local Newsgroup** server control link.

Step 4:   When the "Creating a Newsgroup" form is displayed, do the following:

        C   Enter the name of the newsgroup in the Group Name field
        C   Select the permission which is most appropriate for this newsgroup
        C   Enter the name of the individual requesting the creation of this newsgroup.

Step 5:   After entering all required information as indicated above, press the **Make These Changes** button to send your request to the news server.

When the news server has completed creating this new newsgroup, the "Success!" form will be displayed.

4.2.2   Creating a Distributed Newsgroup

A distributed newsgroup is a newsgroup which exists on two or more news servers and where all articles addressed to this newsgroup are passed amongst these news servers. A distributed newsgroup is created in a similar manner as a local newsgroup. However, in addition to creating a newsgroup, your news server must be configured to:

C   Send incoming news articles addressed to this new newsgroup to neighboring news servers.

C   Receive incoming news articles from a neighboring news server which carries the new newsgroup.

To create a distributed newsgroup, perform the following steps:

Step 1:   Contact neighboring news sites and agree upon a name of the new newsgroup.

Step 2:   Create this newsgroup on your news server (see Sections 4.1 and 4.2).

Step 3:   Make sure that your *newsfeeds* file is properly configured for all new sites which will receive new feeds for this newsgroup from your server.

Step 4:   Make sure that your *hosts.nntp* file is properly configured for all news sites which feed news articles for this newsgroup to your server.

Please refer to the *Netscape News Server - Installation and Reference Guide (UNIX)* for more information pertaining to the *newsfeeds* and *hosts.nntp* files.

NOTE: If a neighboring news site is not receiving articles from your news server for a particular distributed newsgroup, make sure that your *newsfeeds* file is properly configured to send articles to this site.

4.3   Removing a Newsgroup

When removing a newsgroup, you must realize that the newsgroup will only be removed from your news server. Therefore, any distributed newsgroup that you remove from your news server will not be removed from neighboring news sites. To remove a newsgroup using Server Manager forms, perform the following steps:

Step 1:   Start-up the Netscape News Administration Server (if necessary).

Step 2:   Go to the main Server Manager form (see Section 2.3).

Step 3:   Under the Newsgroup Management section, click on the **Remove a Newsgroup** server control link.

Step 4:   When the "Removing a Newsgroup" form is displayed, do the following:

    C   If the newsgroup to be removed appears after the "Group to be Removed" label, then go to Step 5.

    C   If the newsgroup to be removed does not appear after the Group to be Removed label, then do the following:

        -    Click on the **Select Another** button
        -    Follow the instructions which appear on the "Selection" form.

Step 5:   After the name of the newsgroup to be removed appears, press the **Make These Changes** button to send your request to the news server.

When the news server has completed removing this new newsgroup, the Success! form will be displayed.

A newsgroup can also be removed using the *ctlinnd* command. To remove a newsgroup using the *ctlinnd* command, see Section 4.4.

4.4   Creating and Removing Newsgroups using *ctlinnd*

Another way to create a newsgroup is by using the *ctlinnd* command. Usually, a news administrator running as user *root*, will use this command when following instructions provided in a mail message generated by a *newgroup* control message. In this case, the news administrator should follow the step-by-step instructions provided in the mail message.   However, a brief description of the format of the *ctlinnd* command has been provided below:

```
/h/COE/Comp/NS-NEWSS/bin/news/bin/ctlinnd <action> <group>
  [<restriction>]
```

where:

<action>   *newgroup* (to add a newsgroup)
                            rmgroup (to remove a newsgroup)

<group>   name of newsgroup

<restriction>   For example, *moderate* to create a moderated newsgroup (this field is not required for all actions [e.g., *rmgroup*]).

Example: To create a local newsgroup called *news.crisis.somolia,* execute the following command:

```
/h/COE/Comp/NS-NEWSS/bin/news/bin/ctlinnd newgroup
  news.crisis.somolia
```

Similarly, to <u>remove</u> the newsgroup *news.crisis.somolia* from your news server, execute the following command:

```
/h/COE/Comp/NS-NEWSS/bin/news/bin/ctlinnd rmgroup
  news.crisis.somolia
```

NOTE: The following environment variables must be set before running *ctlinnd*, or any other news server related command from the command line:

<u>Variable</u>   <u>Value</u>

NS_NEWSCONF   */h/COTS/NS-NEWSS/news-119/config/nsnews.conf*
NNTPSERVER   *[news_server_name]*

4.5   Using "News Make Group" (NewsMkGrp) to Create a Newsgroup

To facilitate the creation of newsgroups from remote DII workstations, the News Make Group segment has been developed for installation on any DII workstation. This segment is designed to present the user with a number of access options by which the user can create newsgroups which provide optimum functionality for his or her site.

When a user creates a newsgroup using News Make Group, it should be noted that what is actually created is a *newgroup* control message which is then sent to the new site(s) specified. Once received, news servers at neighboring news sites process this control message and perform the appropriate action (see Section 4.1.1).

For details on how to use News Make Group, refer to the *User Manual - News Make Group* documentation.